

# Staying Fire-Free

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**H**ot-work problems don't have to plague a ship's availability if you follow the example set by the crew of USS *Carl Vinson* (CVN-70) during one of their complex overhauls. Those Sailors logged more than a million work-hours without a single hot-work fire.

According to the ship's fire marshal and fire-watch division officer at the time, "We had pieces of tape, rags, gloves, and stuff like that smolder, but we never had one fire caused by a welder. We didn't even have a fire watch suffer a skin burn," he boasted.

"It wasn't easy keeping up with the 350 watches running from one space to another," he explained. "We solved this problem by using dispatchers. These people maintained a big board that showed each hot-work location and the fire watch assigned there.

"When we sent Sailors on fire watch, we knew they were prepared for the task. Everyone in our division had gone through fire-watch training and was qualified in damage control. We also made sure they had goggles, gloves and CO<sub>2</sub> bottles before going on watch. Besides these precautions, we sent QA people to double-check the watch-standing procedures. If they found anything wrong, welding stopped until a CPO could investigate.

"Our QA people made sure the fire watches were equipped and that there were enough watches to monitor all potentially hot areas. The QA people also monitored shipyard workers. If we had a problem with one of them," said the fire marshal, "we turned to our shipyard liaison. This person provided a buffer between the Navy and civilian personnel and helped us a lot. We respected him, and in return, we could count on him to tell us when we did something wrong."

The fire marshal likened a smooth-running fire-watch division to poetry in motion. "A welder came to fill out his hot-work chit before 1400 and turned it in. We put it in one of two stacks—definite or contingent. This system cut down the workload of the fire marshals; it prioritized the spaces they had to check. They picked up the chits and checked all spaces for



A USS *Carl Vinson* Sailor stands fire watch as a shipyard worker welds one of the ship's bulkheads.

Navy photo by PHAN Lawrence J. Davis

# in Overhaul



flammables by 2300, which started a new hot-work day.”

The fire-watch supervisor attributed part of USS *Carl Vinson*’s success in preventing fires during overhaul to the way they processed hot-work requests. “We handled them differently than other ships. Our chits were good for 24 hours, instead of 72 like theirs,” he explained. “All our watchstanders were alert to make sure no one did any hot-work on the ship without our knowledge.”

There also was another reason for USS *Carl Vinson* staying free from hot-work fires. “We didn’t let the welders have overall hot-work responsibility,” said the fire marshal. “In other words, we didn’t give up the ship, a mistake other crews sometimes make.”

When overhaul nearly was done, someone asked the fire marshal if he planned to relax the rules for fire watches. “Absolutely not,” he responded. “Doing things by the book gave us our clean track record, so we’ll keep using this method. We’ve reduced the number of fire-watch personnel, but those on watch and the welders continue working as safely as possible.”

If you want to increase the success of your fire-watch program, follow this formula:

**Draft a fire-watch instruction.** If you need a place to start, use the Naval Safety Center’s “Guide to Safety in an Availability,” available online at <http://safetycenter.navy.mil/afloat/surface/downloads/availabilityguide.doc>. Your instruction also can include manning, structure

of the fire-watch division, qualifications, and training requirements.

**Talk to the crews of ships that recently completed availabilities, and review your own ship’s historical data for lessons learned.** This information is an excellent source of fire-prevention data that can be used for training and setting up your own fire-watch program.

**Use personnel qualification standards to produce a knowledgeable fire-watch division.** Document all training and qualifications obtained for each person.

**Equip all fire-watch personnel with everything they need to do their job.** Make sure all PPE is the right type and is in good condition. Have eye, ear, hand, and respiratory protection available. The correct fire extinguishers also must be available.

**Monitor the hot-work areas with daily QA checks and re-checks by the DCA, fire marshal, or safety-division or fire-watch personnel.**

**Maintain ownership of the ship.** Establish policies that personnel from the ship and shipyard agree on, and enforce these policies. A point of contact between the ship and shipyard concerning fire-watch issues is a must.

**Don’t let industrial waste build up aboard the ship.** Insist on cleanliness. ■

*Refer to section 22 of the NSTM, Chapter 074, Vol. 4, Gas-Free Engineering, and the Safety and Occupational Health Program Manual for Forces Afloat (OpNavInst 5100.19E) for more fire-watch information. [OpNavInst 5100.19E, signed May 30, 2007, is available online at <http://www.safetycenter.navy.mil/instructions/OSH/5100-19E/default.htm>.] You also should review shipyard instructions and check out the “Safety in Availability Links” at <http://www.safetycenter.navy.mil/afloat/surface/shipyardlinks.htm>.*

*Adapted and updated from a combined story that appeared in the January-March 1998 issue of Fathom magazine, when the authors were assigned, respectively, to USS Leyte Gulf (CG-55) and USS Carl Vinson (CVN-70). The current whereabouts of JO3 Greene are unknown.*